

ABSTRACT OF THE DISCLOSURE

A method for cooling atoms, having a plurality of magnetic sublevels, involves a laser. Specifically, multiple polarized coherent light sources of a predetermined wavelength are sequentially emitted to atoms to move the electrons of the atoms to a lower magnetic sublevels, hence cooling the atoms. The sequentially emitted laser light can be applied at predetermined time intervals, whereby it becomes possible to laser-cool a variety of atoms including semiconductor atoms, such as silicon and germanium.